



PCT/GB 2004 / 0 0 4 2 2 3	
REC'D 04 NOV 2004	
WIPO	PCT



INVESTOR IN PEOPLE

The Patent Office
Concept House
Cardiff Road
Newport
South Wales
NP10 8QQ

GB04/4223

PRIORITY DOCUMENT
SUBMITTED OR TRANSMITTED IN
COMPLIANCE WITH
RULE 17.1(a) OR (b)

I, the undersigned, being an officer duly authorised in accordance with Section 74(1) and (4) of the Deregulation & Contracting Out Act 1994, to sign and issue certificates on behalf of the Comptroller-General, hereby certify that annexed hereto is a true copy of the documents as originally filed in connection with the patent application identified therein.

I also certify that the attached copy of the request for grant of a Patent (Form 1/77) bears an amendment, effected by this office, following a request by the applicant and agreed to by the Comptroller-General.

In accordance with the Patents (Companies Re-registration) Rules 1982, if a company named in this certificate and any accompanying documents has re-registered under the Companies Act 1980 with the same name as that with which it was registered immediately before re-registration save for the substitution as, or inclusion as, the last part of the name of the words "public limited company" or their equivalents in Welsh, references to the name of the company in this certificate and any accompanying documents shall be treated as references to the name with which it is so re-registered.

In accordance with the rules, the words "public limited company" may be replaced by p.l.c., plc, P.L.C. or PLC.

Re-registration under the Companies Act does not constitute a new legal entity but merely subjects the company to certain additional company law rules.

Signed

AmBrewer

Dated

20 October 2004

1 its Act 1977
(Rule 16)

THE PATENT OFFICE

A

13 OCT 2003



130CT03 EB44059-1 C00176
P01/7700 0.00-0323917.5

The Patent Office

Cardiff Road
Newport
South Wales
NP10 8QQ

Request for grant of a patent

(See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in this form)

1. Your reference

N/A

2. Patent application number

(The Patent Office will fill in this part)

13 OCT 2003

0323917.5

3. Full name, address and postcode of the or of each applicant (underline all surnames)

GARY W STREET
17 WELLINGTON WORKS
WELLINGTON STREET
KETTERING
NN16 8SE

INTELLIGENT URBAN FURNITURE LTD
57 HEADLANDS
KETTERING
NN15 7EH

Patents ADP number (if you know it)

If the applicant is a corporate body, give the country/state of its incorporation

8481251001.

UNITED KINGDOM

8732542001

4. Title of the invention

MULTI - MULTIFUNCTION

5. Name of your agent (if you have one)

"Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode)

N/A

PITCHLEY House
1 WILLIAM STREET
BURTON LATIMER
NN15 5LN

Patents ADP number (if you know it)

231919 5177

6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (if you know it) the or each application number

Country

Priority application number
(if you know it)

Date of filing
(day / month / year)

~~UK 0223545.9 11/10/02~~

Cancelled. CF. 18/10/04

7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application

Number of earlier application

Date of filing
(day / month / year)

~~43 0223545.9~~

~~11/10/2002~~

8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer 'Yes' if:

YES

- a) any applicant named in part 3 is not an inventor, or
 - b) there is an inventor who is not named as an applicant, or
 - c) any named applicant is a corporate body.
- See note (d)

Patents Form 1/77

9. Enter the number of sheets for any of the following items you are filing with this form.
Do not count copies of the same document

Continuation sheets of this form

Description 2

Claim(s) 1

Abstract 1

Drawing(s) 3 + 2

10. If you are also filing any of the following, state how many against each item.

Priority documents 4

Translations of priority documents

Statement of inventorship and right to grant of a patent (Patents Form 7/77)

Request for preliminary examination and search (Patents Form 9/77) 1

Request for substantive examination (Patents Form 10/77) 1

Any other documents (please specify)

~~4/77~~ 21/77 + 1 extra page of text and drawings.

11. I/We request the grant of a patent on the basis of this application.

Signature

[Signature]

Date

7/10/03

12. Name and daytime telephone number of person to contact in the United Kingdom

GARY STREET
07939 697965

Warning

After an application for a patent has been filed, the Comptroller of the Patent Office will consider whether publication or communication of the invention should be prohibited or restricted under Section 22 of the Patents Act 1977. You will be informed if it is necessary to prohibit or restrict your invention in this way. Furthermore, if you live in the United Kingdom, Section 23 of the Patents Act 1977 stops you from applying for a patent abroad without first getting written permission from the Patent Office unless an application has been filed at least 6 weeks beforehand in the United Kingdom for a patent for the same invention and either no direction prohibiting publication or communication has been given, or any such direction has been revoked.

Notes

- If you need help to fill in this form or you have any questions, please contact the Patent Office on 08459 500505.
- Write your answers in capital letters using black ink or you may type them.
- If there is not enough space for all the relevant details on any part of this form, please continue on a separate sheet of paper and write "see continuation sheet" in the relevant part(s). Any continuation sheet should be attached to this form.
- If you have answered 'Yes' Patents Form 7/77 will need to be filed.
- Once you have filled in the form you must remember to sign and date it.
- For details of the fee and ways to pay please contact the Patent Office.

Multi-multifunction

Technical Field

This invention relates to multifunctional furniture items that provide a footrest, an occasional table, a floor sofa, a low level table, a bench style seat and a mattress all in one form.

Modern lifestyle demands versatility. Living spaces are getting smaller while peoples demands on that space increase. Multifunctional furniture has for some time met that design challenge yet it still needs to evolve maximising the use of space in the home thus giving more pleasure to those that live there. A conventional sofa-bed, for example, is very popular but not the best use of space if another product performs the same functions yet also transforms into a table. A standard footrest-bed is effective in what it does but is still not as much fun as another that also converts into a comfortable floor-sofa - ideal for playing those computer games. Therefore, by revising the present concept of multifunctional furniture and incorporating many other useful functions we have the next generation of multifunctional furniture. Furniture that includes not just two or three functions but five or six.

Present-day multifunctional furniture is often large, heavy and difficult to operate, moreover, when not required in a room it becomes an obstacle rather than an asset. The design challenge then was not only to incorporate further useful functions into the said furniture but also to make it more compact and user friendly, even allowing it to be moved easily or stored away.

Disclosure of the Invention

According to the present invention there is provided a multifunctional furniture item comprising of four equally proportioned cushioned blocks, each individually covered and interconnected by three hinges as in the letter 'W'. The said hinges pivot the blocks as required thus converting the whole into its various forms. The body can thus convert from a footrest into an occasional table then a floor sofa, a low level table, a bench style seat and a mattress. In addition, the two tables have a two part solid tabletop attachment one part for the occasional table and both parts for the low level table. The slip cover goes over the top and sides of the footrest to give it further protection and conceal its multifunctional nature.

Brief Description of the Drawings

A specific embodiment of the design will now be described by way of an example with reference to the accompanying drawing in which:-

Figure 1 gives a perspective view of the footrest, the slip cover coming down over it.

Figure 2 gives a perspective view of the occasional table with durable surface area, also one part of the solid tabletop that attaches to it.

Figure 3 gives a perspective view of the floor sofa.

Figure 4 gives a perspective view of the low level table with durable surface area, also both parts of the solid tabletop that attaches to it.

Figure 5 gives a perspective view of the bench style seat, the backrest resting against a suitable object.

Figure 6 shows the bed mattress fully opened out.

Best Method for Carrying Out the Invention

Reference now should be made to the drawings, in which the same reference numerals are used throughout the different drawings to designate the same or similar components.

Referring to Fig.1 this item comprises of four equally proportioned high density foam blocks 1,2,3,4, each individually covered and interconnected by three upholstered hinges 5,6,7, as in the letter 'W'. The said hinges pivot the blocks as required thus converting the whole into its various forms. The most basic form is the ergonomic footrest as depicted in Fig.1. This takes shape by hinges 5,6,7, remaining closed while 1,2,3,4, overlies each other 1 resting on the floor 4 serving as the footrest. Also shown in Fig.1 is the slip cover 12 that covers the top and sides of the footrest.

By turning the above mentioned footrest alternate way up as seen in Fig.2 blocks 4,3,2,1, overlies each other 4 resting on the floor 1 serving as the occasional table. The cover of 1 comprises in part of a durable material 8, faux leather or the like, thus offering a hard wearing and wipe clean table surface. Fig.2 also illustrates the solid tabletop 10 that can attach to the occasional table (detail not shown). This attachable tabletop can be securely held in place using various means known to those skilled in the art, such as non-slip matting on the underside or velcro. .

In Fig.3 it is demonstrated that by operating hinge 5 and compactly pivoting blocks 2,3,4, over they stand upright against the floor to form a floor sofa. The seat cushion 1 rests on the floor while 2,3,4, provide an ergonomic backrest. It is also noted an identical form can be achieved alternate side up with 7 opened and 3,2,1, arranged as above.

The low level table of Fig.4 is produced by closing 5,7, and opening 6 to the full. The covers of 2,3, comprise in part of a durable material 9, faux leather or the like, thus offering a hard wearing and wipe clean table surface. Fig.4 also illustrates both parts of the solid tabletop 10,11, which can be attached to the low level table (detail not shown). The said tabletop can be securely held in place using various means known to those skilled in the art such as non-slip matting on the underside or velcro. The table's two parts 10,11, join together using a suitable method such as metal dowels, a woodwork joint or a hinge.

Fig.5 then represents a bench style seat easily formed by closing hinges 5,6, leaving 1 resting on the floor 2,3 overlying it. Hinge 7 is then operated enabling 4 as the backrest to be propped upright against a suitable object. It is noted that an identical form can be achieved alternate side up when the blocks are arranged as above but conversely, hinges 7,6, being closed for seating and 5 opened for the backrest.

Finally, the full sized mattress illustrated in Fig.6 is produced by opening 5,6,7, so that 1,2,3,4, lie flat across the floor as a mattress. It is functional as a mattress on either side.

Although the preferred embodiments of the present invention have been disclosed for illustrative purposes, those skilled in the art will appreciate that various modifications, additions and substitutions are possible, without departing from the scope and spirit of the invention as disclosed in the accompanying claims.

This invention relates to footrests convertible into seating and or a bed. Its construction consists of four firm foam blocks of equal rectangular shape each overlying the other with the lowermost resting on the floor the uppermost for use as a *footrest*.

Each foam block is individually covered by fabric the said covers joined by strong pivoting fabric hinges. Thus the four blocks pivot in a 'w' fashion using three such hinges.

The footrest becomes a *bench style seat* by pivoting the uppermost block vertically supporting it against a wall, the lower three foam blocks provide the seating while the uppermost is used as the backrest.

The footrest converts into a *floor seat with self supporting backrest* by pivoting over the upper three blocks of foam until they support themselves upright on the floor, the upright foams act as the backrest while the flat one provides floor seating.

When fully unfolded the footrest converts to a *full sized mattress*. The foam blocks lie flat on the floor in a side by side relationship thus providing single or double accommodation depending on the desired length of the foam.

A separate *slip cover* may be fitted over the top and sides of the footrest thus concealing its multifunctional nature.

CLAIMS

1. A multifunctional furniture item comprising of four equally proportioned cushioned blocks each individually covered and interconnected using three hinges as in the letter 'W', the said hinges pivot the blocks as required thus converting the whole into its various forms the body can thus transform into each of the following forms; a footrest, an occasional table, a floor sofa, a low level table, a bench style seat and a mattress.
2. A multifunctional furniture item as in Claim 1 wherein a footrest is produced by all hinges remaining closed the four cushioned blocks overlying eachother the lowermost resting on the floor the uppermost serving as an ergonomic footrest a slip cover also covers it.
3. A multifunctional furniture item as in Claim 1 wherein an occasional table is formed by turning the footrest in Claim 2 alternate way up all hinges remain closed the four cushioned blocks overlying eachother with the lowermost on the floor the uppermost serving as the occasional table the cover of the uppermost block incorporates a durable material providing a hard wearing and wipe clean table surface, in addition, an attachable solid tabletop one of two parts can be secured to the occasional table using various means known to those skilled in the art.
4. A multifunctional furniture item as in Claim 1 wherein a floor sofa is provided by operating the lowermost hinge then compactly pivoting the upper three blocks over until they stand upright against the floor the lowermost block provides the seating while the upper three blocks serve as an ergonomic backrest it is noted an identical form can be achieved alternate side up with the blocks manipulated as above but conversely.
5. A multifunctional furniture item as in Claim 1 wherein a low level table is produced by opening only the middle hinge thus pivoting the two upper blocks over until they rest flat on the floor next to the lower two blocks the table's surface area incorporates a durable material as described in Claim 3, an attachable solid two part tabletop can also be secured to the low level table using various means known to those skilled in the art the solid tabletop being in two parts for use on either the occasional table of Claim 3 one part or this low level table two parts the two parts join together using a suitable method known in the art.
6. A multifunctional furniture item as in Claim 1 wherein a bench style seat is provided by operating the uppermost hinge thus pivoting the uppermost block upright to be rested against a suitable object the lower three blocks provide the seating the uppermost the backrest, it is noted an identical form can be achieved alternate side up with the blocks manipulated as above but conversely.
7. A multifunctional furniture item as in Claim 1 wherein a bed mattress is provided by opening all three hinges fully enabling the four blocks to lie flat across the floor as a full sized mattress the said mattress may be used on either side.
8. A multifunctional furniture item substantially as described herein with reference to Figures 1-6 of the accompanying drawings.

ABSTRACT

MULTI-MULTIFUNCTION

The present invention provides a multifunctional furniture item with six functions for home and leisure. The structure and composition of the item is simple to ensure a compact, lightweight and easy to use product. The body consists of four equally proportioned cushioned blocks 1,2,3,4, each individually covered and interconnected by three hinges 5,6,7, as illustrated in the letter 'W'. The said hinges pivot the separate blocks as required thus converting the whole into its various forms. With all hinges closed it is a footrest (Fig.1), or alternate way up, an occasional table with durable surface area 8 (Fig.2). The hinges then open out to produce other functions including a floor sofa (Fig.3), a low level table with durable surface area 9 (Fig.4), a bench style sofa (Fig.5) and a full sized mattress (Fig.6). The two part solid tabletop 10,11, (Fig.2/4) and a slip cover 12 (Fig.1) are added as attachments.



'1/3'

FIG 1

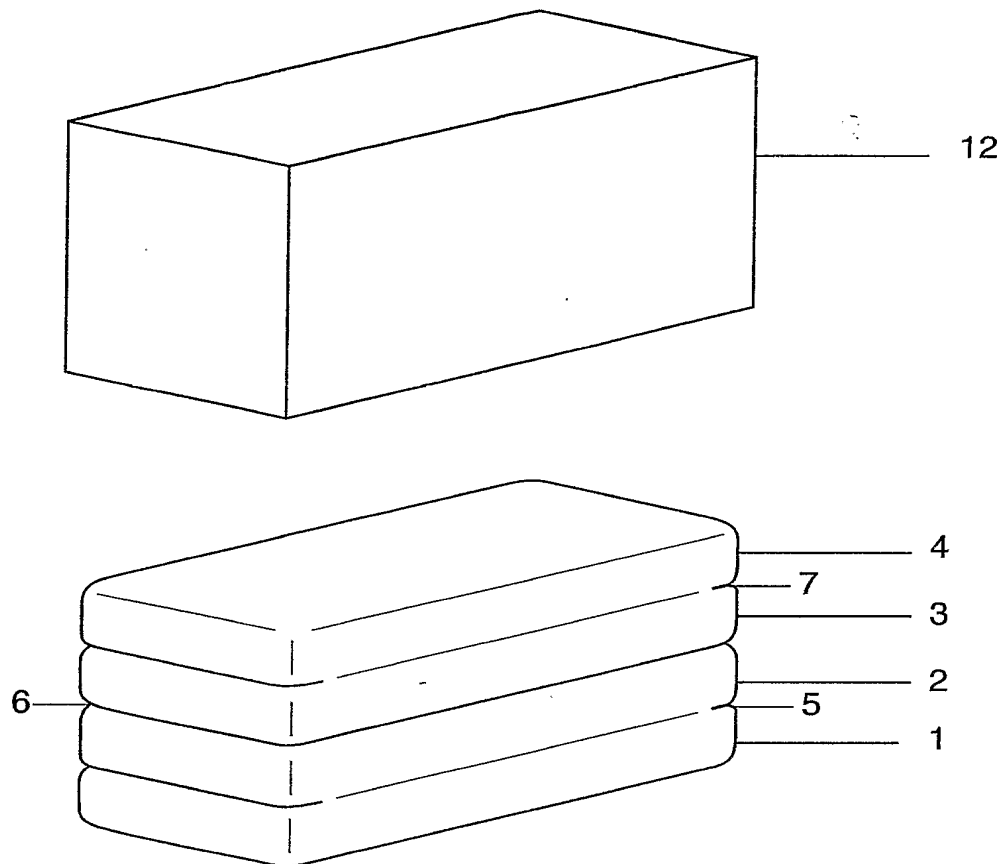
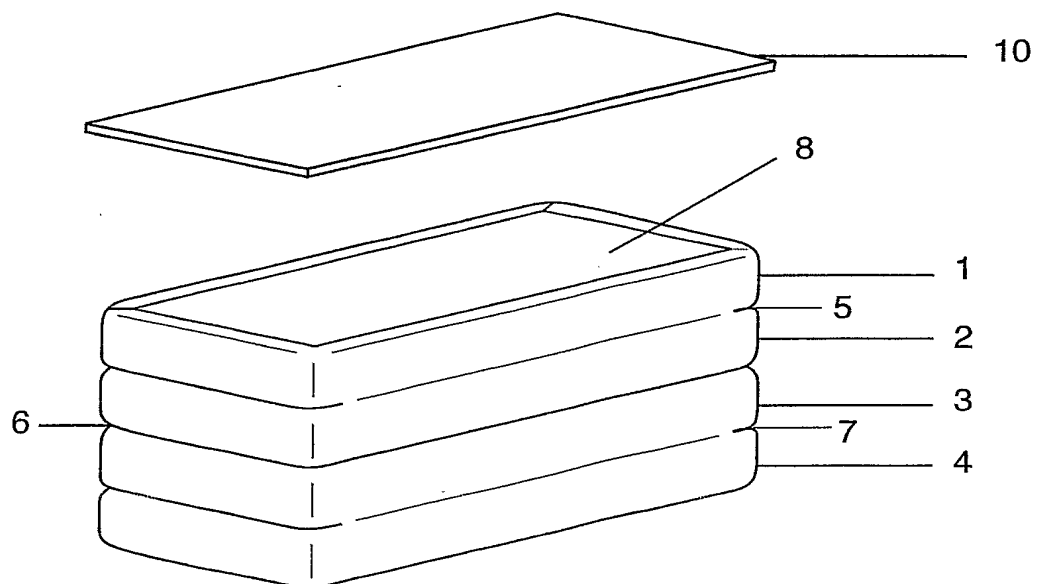


FIG 2





'2 / 3'

Fig 3

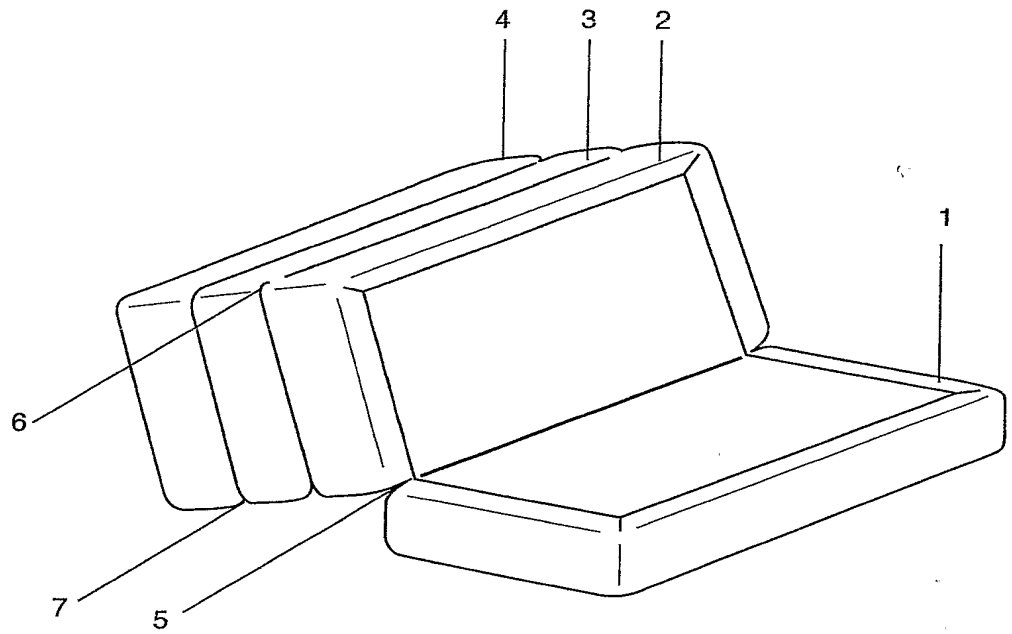
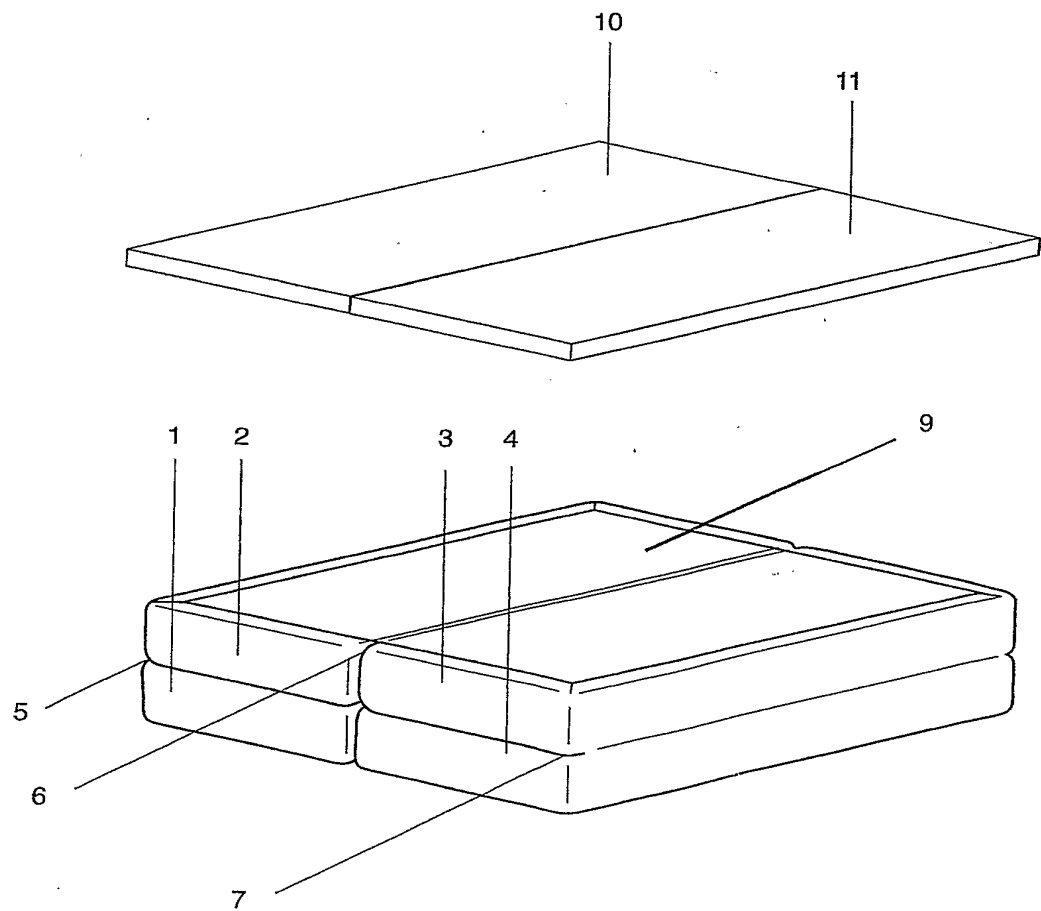


Fig 4





'3 / 3'

FIG 5.

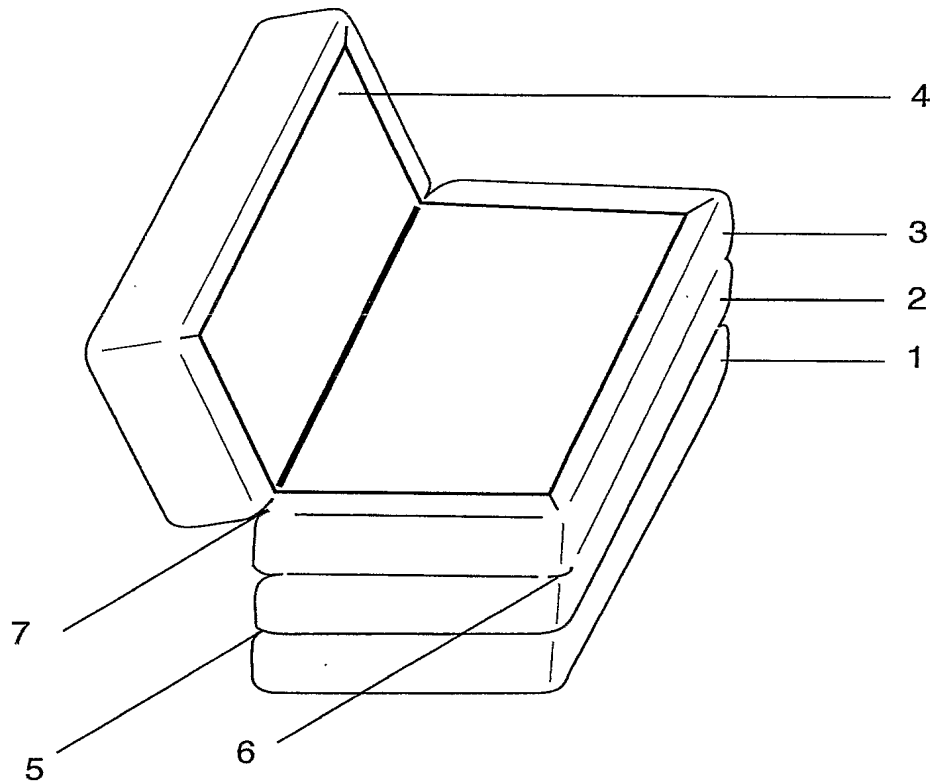
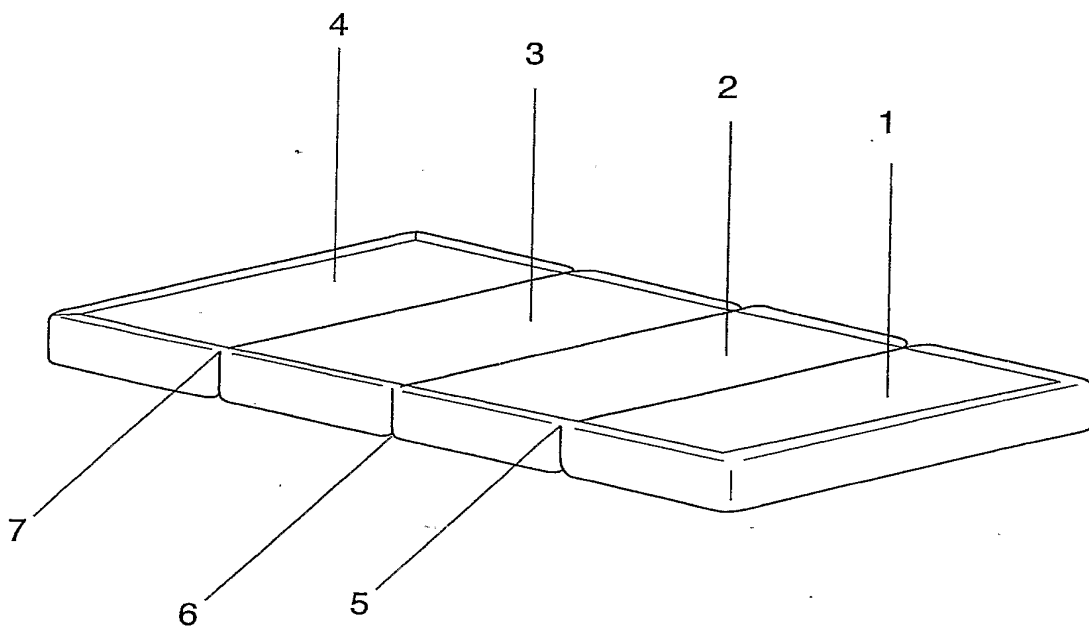
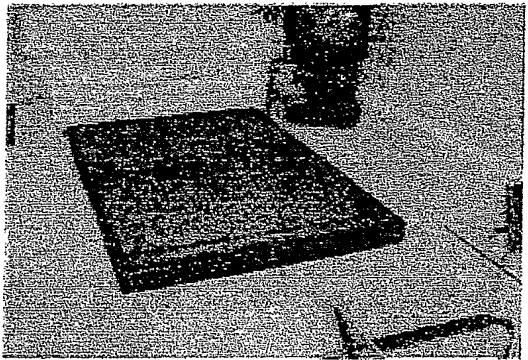
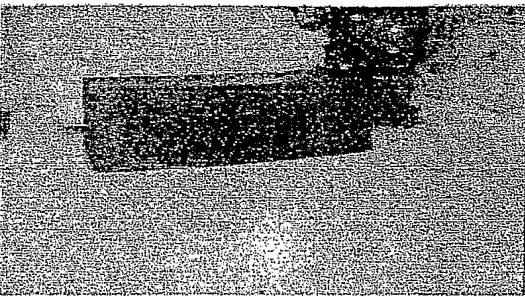
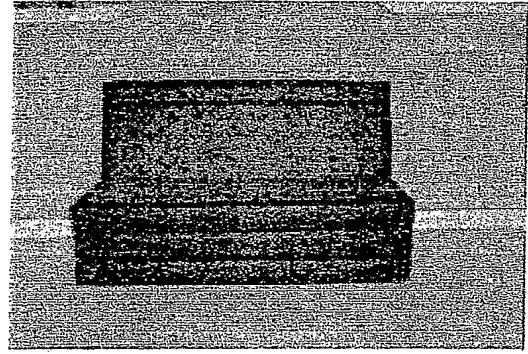
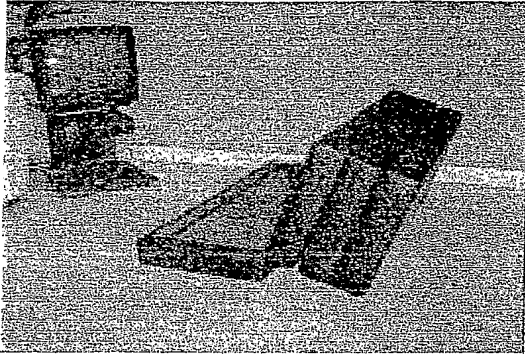


FIG 6







PCT/GB2004/004223

